

## Osage Iowa 9 Constructability Meeting

Held Thursday, May 23, 2013 in the Office of Contracts Workroom

Meeting began at 1:06, those present:

Wes Musgrove, Iowa DOT; Wayne Sunday, Iowa DOT; Vicki Dumdei, Iowa DOT; Cork Peterson, Peterson Contractors; Jim Rost, Iowa DOT; John Adam, Iowa DOT; Brian Jacob, Cramer and Assoc.; Ray Ringgenberg, Iowa DOT; Mitch Dillavou, Iowa DOT; Neal Fobian, Iowa DOT; Krandel Jack, Iowa DOT; Roy Gelhaus, Iowa DOT; Tom Jacobson, Iowa DOT; Justin Lechtenberg, Reilly Construction; Jonathen Kipp, Reilly Construction; Kent Nicholson, Iowa DOT; Gary Novey, Iowa DOT; Brent Klaiber, Certex; Bill Adams, Hancock Concrete; Greg Mulder, Iowa DOT; Dave Little, Iowa DOT; Ron Otto, Iowa AGC; conferenced in on phone; Randy Taylor, Iowa DOT; Mark Black, Iowa DOT; Mark Callahan, Iowa DOT; Dean Wiebke, Iowa DOT; Krista Rostad, Iowa DOT; Bryan Dannen (Intern), Iowa DOT; Nick Humpal, Iowa DOT. Mary Thompson, Iowa DOT – minutes.

Introductions were given and Wes passed out construction plans showing project as built (handout #1 attached) and a brief explanation of the 1923 open bottom concrete arch structure was given.

One side of the foundation is on rock and the other side of the foundation is on piling.

There is narrow Right of Way approximately 55 – 60 foot on each side.

There was discussion of environmental permit issues that would need to be handled.

At the time of the constructability meeting, it was discussed that the failed structure would be replaced with two 14' x 14' concrete box culverts. Gary handed out the preliminary construction plans (handout # 2 and 3, attached). It was determined later after the meeting that a triple 14x14 RCB will be installed.

The road is currently closed and District 2 would like to get it opened up as quickly as possible. There has been a tentative letting date in 2 weeks with project completion within a month after the letting.

Discussion took place about how long it will take to get this project let, constructed and the road re-opened:

Tentative letting date of June 4, 2013 has been set, there is a project ER number assigned to this project so there may be federal reimbursement.

The precast contractors said that 2 weeks is a lot of down time and feel that if the precast box culverts can be ordered/purchased, they could begin working on them within that 2 week time period. Boxes are made, cured and tested daily.

Discussion about whether or not the contractor who is awarded this contract would be able to “push back” other projects they have already in order to complete this job in the time frame wanted by the Department.

The ten day notice of demolition will be taken care of by Location and Environment and contractors will be able to begin work as soon as the contract is signed.

Discussion on utilities took place and Dave Little passed around an aerial view/diagram of where the utilities are located (handout #4 attached). District 2 is working with all the utility companies to let them know the time frame we are talking about. Issues with utilities are:

Century Link – fiber optic lines including the 911 emergency line is hooked up on the north side and will need FCC approval/Federal permits to take the line out of service to splice and relocate the line. There is no way possible to work around this line.

Utility companies are aware of their responsibilities and the time frame in which to have lines removed/relocated to allow the contractors to begin work.

The power line on the south side is of concern, is there a way this can be worked around

District 2 has been talking to the property owners, they have spoken to all but one and District 2 believes there will be no problem and will get written permission to use/work on their land. The DOT will go through the legal aspects of buying the land after the work has been completed as to not hold up the construction of the box culverts and get this road re-opened.

Discussion took place on the ability to use a coffer dam. It's believed that it would be tough to use a coffer dam because of the rock and the existing flow of water. More discussion took place on changing the flow of water.

Discussion on what bedding will be used. DOT does not want to make the bedding on rock and other material. The rock will need to be removed.

Discussion on how much space is needed between the two culverts. (Now three culverts)

Discussion about a waterway being dug to divert the flow of water around the work area if necessary.

Discussion on pavement removal. Approximately 100 feet of pavement will need to be removed and replaced on each side of the culverts for the crane and lifting equipment to be brought in. There will be no changes to the existing grade of the pavement. Road will be replaced at the existing grade level.

Discussion on using galvanized sheeting – this could be a problem purchasing galvanized sheeting on such short notice. Sheeting will be buried so there may not be a need to use galvanized sheeting. What sheeting would be used on the rock side of the structure, perhaps notching into the rock to seat a

curtain wall. More discussion took place on carving a curtain wall out of the existing rock on the one side of the structure.

Wing walls will need to be installed.

To move the power lines there will need to be a private easement, also for the gas line. There was no idea on or for Century Link.

Unknown risks for the contractors include:

Utilities – Century Link needs to obtain federal permits to relocate 911 line. Century Link has said they do have a private easement, but are not sure where it's located and will look into this.

Weather conditions – the DOT does have some options to re-route the water.

Dean Wiebke has made a design request One-call to the utility companies.

Letting date will remain on June 4<sup>th</sup> for now.

Purchasing will be informed by Wes that they need to get quotes for fabricating the box culverts.

Contractors will be in charge of the trucking of the fabricated pieces so they can seat them as they are delivered.

More discussion on utilities – the power line on the south side, how far out do the contractors need to have the power lines to get the boxes into place – the height of the transmission lines need to be out of the way of moving the box pieces into place. The east/west line is guessed to be at 30 to 40 feet above the stream line. The transmission line needs to be 10 foot south of the head wall. In the work area they need to be at least 100 feet out from the center line to be safely out of the way of the work being done.

More discussion on pavement removal – do the contractors need to remove the pavement to bring in the lifting equipment?

Discussion on backfill, there will be the option to use flooded granular or flowable mortar.

Property owners on the west side – their access will be cut off and the property owners need to be made aware of the length of time this will be for. They also need to be told about the pavement removal.

Discussion about the contract –

User cost for detour is approximately \$9,000/day

Pavement determination is 9" PCC

Contract will allow alternative pavement type

Lump sum

Incentive/disincentive

There will need to be guardrail

Bid items for contract

Working days and incentive/disincentive

Discussed 30 working days – 6 day work week @\$25,000/day incentive

An accelerated work schedule will be required

Disincentive would begin at 40 days @\$10,000/day

Rock excavation – there will be no blasting because there are residential houses near-by.

Preference for what it's seated on – minimum 12-inches of bedding material. Not directly on rock.

Contractors will need to know who the supplier of the fabricated pre-cast concrete box culvert is and where materials will be located for pick up- this will need to be included in the proposal for bidding.

**Developments since the May 23 Constructability Meeting:**

It was subsequently determined by Bridge that a triple 14x14 RCB will be installed at this location.

District 2 staff verified with the utility company the clearance of the north-south overhead transmission line located east of the bridge at 29 FT above the roadway.

A **materials purchase letting** will be held Thursday, May 30 having the following contract period:

- Calendar Day completion June 21, Liquidated Damages at \$1,000.00 per Calendar Day.
- All pieces must be fabricated, cured, stockpiled, and available for transport by the contractor to the jobsite by end of day June 21. Fabricator will be responsible to load precast elements stockpiled at their yard on the contractor's transport equipment.
- The proposal guaranty will be waived. Contractor's performance bond and liability insurance are still required as per the Standard Specification.
- Contracts contacted both fabricators in attendance at the May 23 constructability meeting to request input regarding the difficulty of a fabricator obtaining a performance bond as required by spec, and were informed this would not be an issue. This inquiry was made because fabricators typically do not bid as prime contractors.

An **emergency construction letting** will be held Tuesday, June 4 having the following contract period:

- 40 Working Days, June 10 Late Start, \$25,000 per WD incentive, \$10,000 per WD disincentive
- Location of fabricator(s) will be included in the bidding proposal for the construction contract.
- The proposal guaranty will be waived due to the emergency nature of this work. Contractor's performance bond and liability insurance are still required as per the Standard Specification.

**May 23, 2013 Osage IA-9 Constructability Meeting Sign-In Sheet**

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